



Future Scenario Planning in Strategic Management

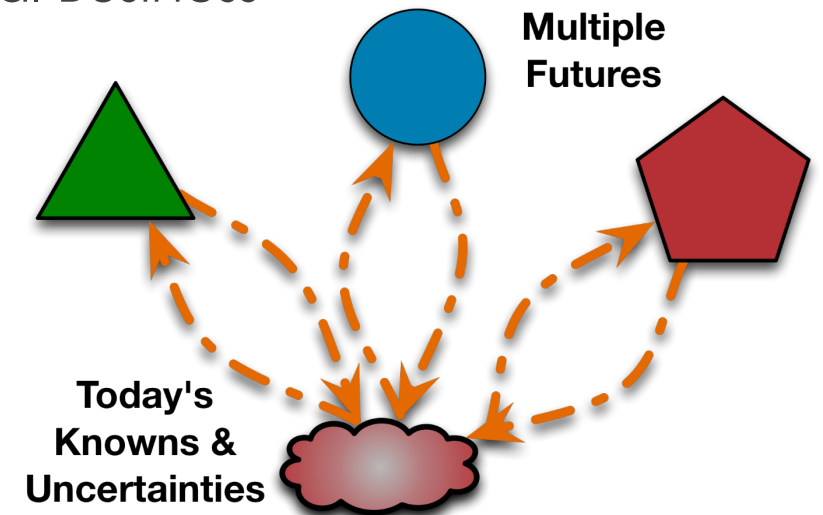
ILYA BARAEV

FABIO GIRARDI FRIGONI

MARIANA ORTOLAN SAYEG

What is Future Scenario?

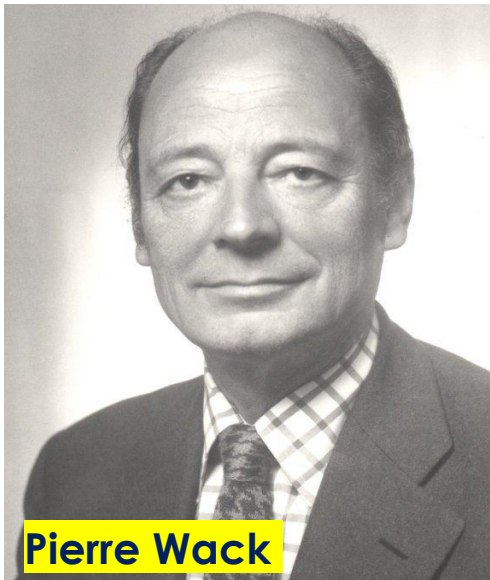
“Future scenario is a rich, data-driven story about future that drives better decisions today. Scenarios offer a way to organize and test assumption about the future despite inherent complexity and uncertainty. Scenarios provide a framework for recognizing and adapting to change over time – ahead of time” (Global Business Network, 2008, p.11)



Roots of Future Scenario

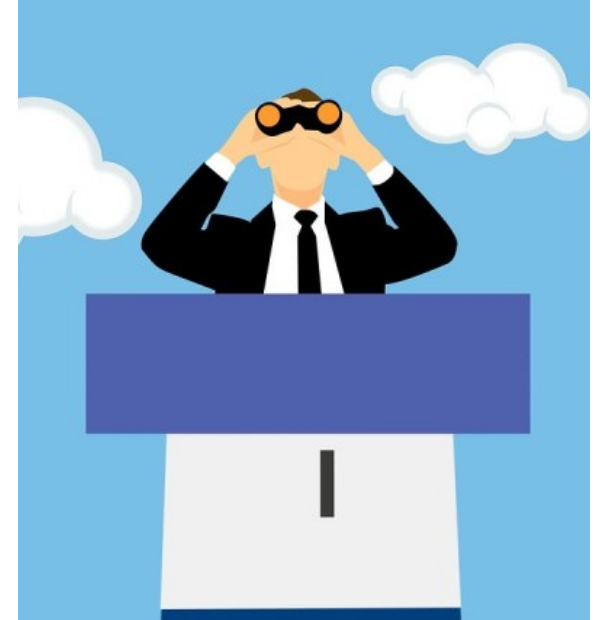


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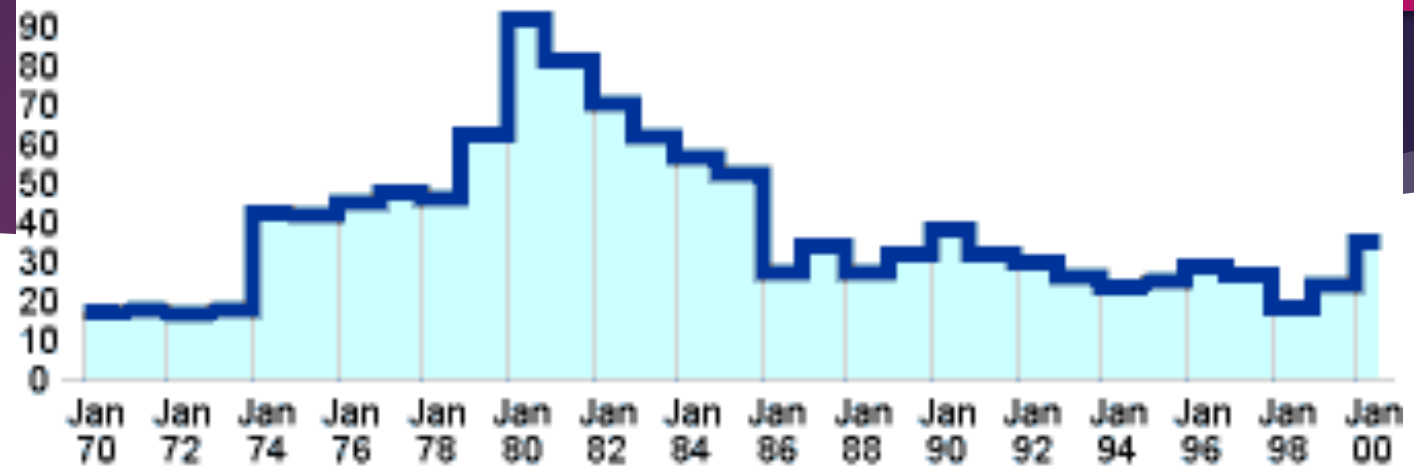
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PREÇO MÉDIO ANUAL DO PETRÓLEO

Em US\$ do ano 2000*



*Inflacionado pelo índice de Preços ao Consumidor das EUA

Fonte: Federal Reserve



Shell



- Increase control in local operation
- Formation of intermediate stocks
- Acceleration in oil prospecting in other regions

Why create a Future Scenario?

Scenario help to deal with uncertainty in following ways:

- ▶ Understand the environment – More rational in risk taking
- ▶ Acknowledge structural uncertainty – Avoid taking unreasonable risks
- ▶ Became adaptable – Expanding mental models
- ▶ Avoid denial – Think unthinkable
- ▶ Avoid paralysis – Quick and rational decisions



Scenario Applicability

Business Environment	Decision makers' mental models	Scope of decisions	Applicability of Scenario planning
Stable times	Management's mental model and reality match well	Little adjustments and fine-tuning.	Scenarios are not suitable
Rapid change / Complex environment	Mental models do not match reality	Big strategic decisions	Scenario approach can make the difference

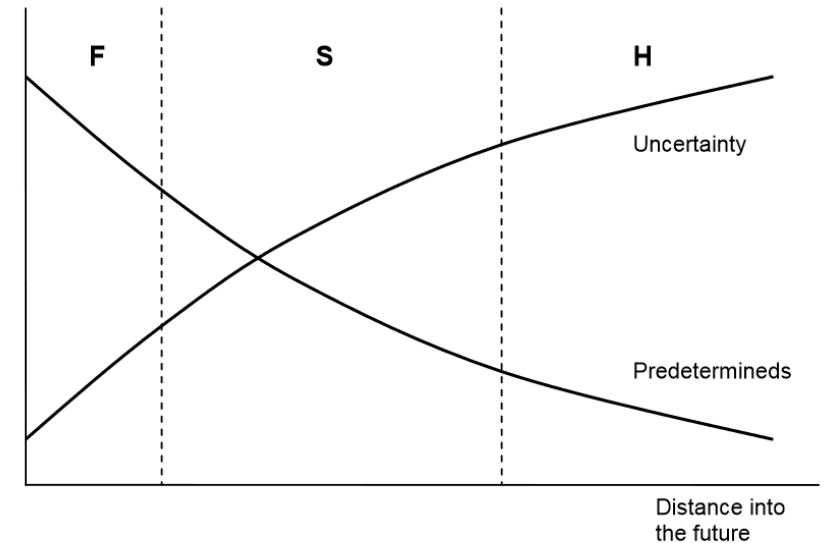


Figure 4. The balance of predictability and uncertainty in the business environment (Van der Heijden, 2005, p.98).

Example of Future Scenario



- Market World – a future based on market forces and new technology bringing prosperity and a brighter future;
- Fortress World – a future in which disproportional economic growth created prosperity in few countries, surrounded by countries drowned in poverty and despair. This future contained stories of environmental and social deterioration, violence and conflicts;
- Transformed World – a future of fundamental social and political changes that give a hope for future of mankind (Hammond, 1998).

Hammond, 1998 – Future Scenario for seven major world regions for the next 50 years – Based on long-term analysis of demographic, economic, social, environmental and security trends

Terminology

- ▶ **Focal issue** – “What is the future of energy market in Europe in 2050?”
- ▶ **Official Future** – Common sense in a organization about the future environment
- ▶ **Driving Forces** – Major forces, outside control of an organization that affect the future
 - ▶ Predetermined elements
 - ▶ Critical uncertainties
- ▶ **Scenario implication** – Opportunities, challenges, options...
- ▶ **Leading Indication** – Sign that an organization can monitor in order to determinate if a particular scenario begins to unfold



Scenario Planning Team

Participants of scenario planning process and their roles:

- ▶ **Client** - who is the main beneficiarie of the scenario process. Ex. management team with the aim of reviewing the strategic Direction of the organization;
- ▶ **Stakeholder** – Other beneficiaries of the scenarios
- ▶ **Experts** – people with subject knowledge
- ▶ **Remarkable people** – Individuals who are capable to think broadly and can help to open up the discussion and introduce new perspectives;
- ▶ **Facilitator** – Person involved in promoting and facilitationg the scenario process



Analysis of Methodology

- ▶ Scenario planners start – “big issues” (concerns of the stakeholders)
- ▶ Methods:
 - ▶ Generative
 - ▶ Adaptative

Generative Scenario Planning

- ▶ Generative Scenario Process is an iterative process;
- ▶ Starting with the first set of scenarios used as a way to understand the strategic situation better and proceed to next iteration of the scenario set;
- ▶ Repeating until the strategic situation is successfully reframed.

Adaptative Scenario Planning

- ▶ In adaptative process scenario building phase is linear and predetermined;
- ▶ In most cases the first or the second generation of the scenarios is used to evaluate the strategy of the organization;

Other Methods

- ▶ Scenarios that are created during each iteration of generative and adaptative processes can be done according to three widely used methods – **inductive, deductive and incremental approaches**.

Inductive Scenario Planning

- ▶ Starts with brainstorming of the possible events in the future and the scenarios are constructed out of these events as story elements;
- ▶ The structure of the scenarios emerges by itself (Van der Heijden, 2005, p. 236)

Inductive Scenario Planning

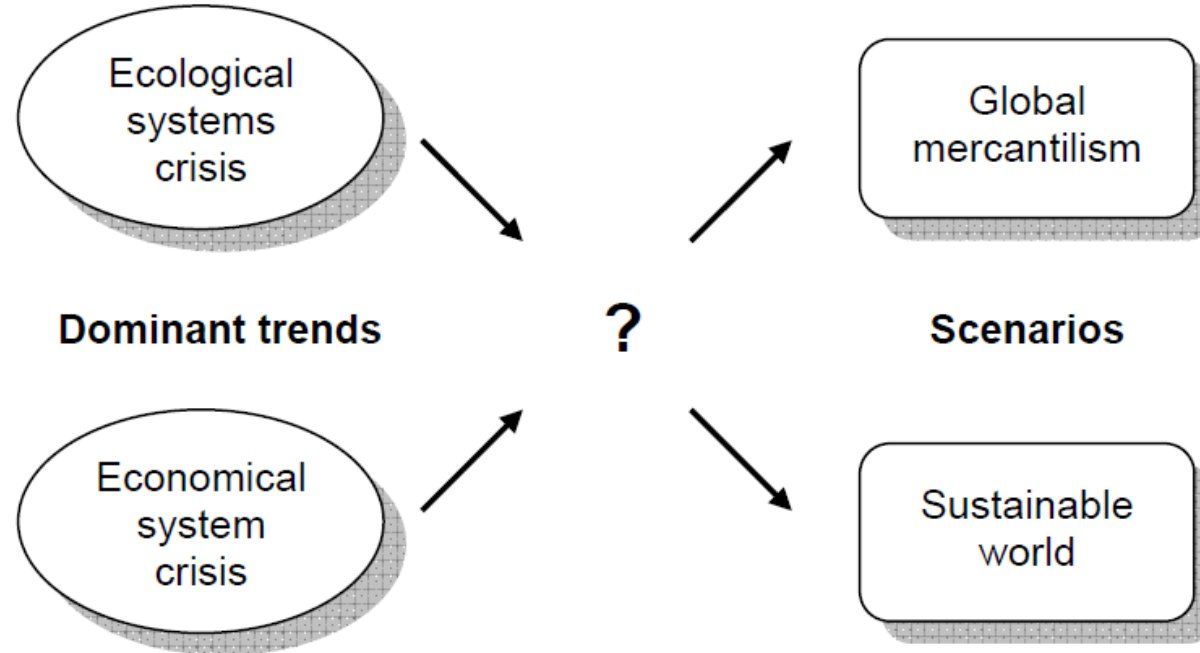


Figure 5. Scenario structure, based on inductive method (Van der Heijden, 2005, p.246).

Inductive Scenario Planning

- ▶ This method can lead to powerful results;
- ▶ However it is less structured and relies on the patience of the group to continue working until the final agreement is achieved (Ogilvy and Schwartz, 1998);
- ▶ The caveat is that such unsystematic approach requires a great degree of creativity and tolerance for ambiguity.

Deductive Scenario Planning

- ▶ The team creates an overall framework first and then fits the pieces of data and possible future events into the framework the way they fit naturally (Van der Heijden, 2005, p. 236)
- ▶ In practice a framework is a matrix which ensures scenarios are qualitatively different in a logical way and ensures that the key drivers are taken into account in all scenarios (Ogilvy and Schwarts, 1998);

Deductive Scenario Planning

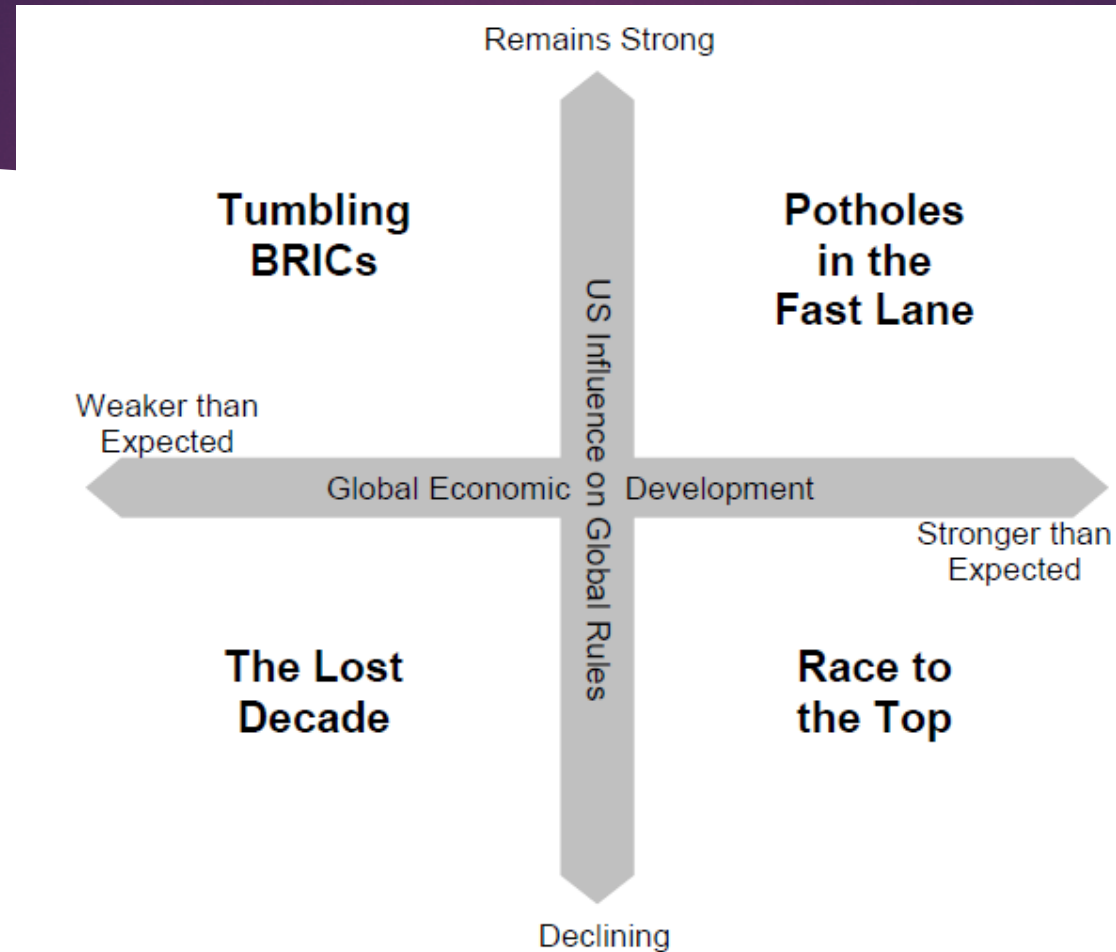


Figure 6. Scenario Matrix: Competitive environment for large multinational US companies (Global Business Network, 2008).

Deductive Scenario Planning

- ▶ Deductive method is a very structured approach which gives freedom for the creativity in the group and at the same time allows robust estimation of the timing of the scenario creating process.

Incremental Approaches Scenario Planning

- ▶ The incremental method, described by Fulton and Searce (2004) and Van den Heijden (2005), but sometimes also referred as modified inductive method (Ogilvy and Schwartz, 1998);
- ▶ Starts by articulating the official future and then brainstorming for at least two different scenarios that diverge from the official future;
- ▶ According to Van den Heijden (2005, p.236) this approach aims lower and usually does not produce as insightful results as other methods;
- ▶ Useful for the clients who are not familiar with the scenario planning approach and are strongly attached to the “official future”;
- ▶ Easier to start development of the scenarios from a “surprise-free” scenario or a “consensus forecast”, to provide a natural bridge to the future;
- ▶ Often without the “surprise-free” scenario, all future possibilities may appear alien to the managers involved in the scenario planning for the first time and they may reject the project (Wack, 1984).

Summary

- ▶ **The choice of scenario development method** → Depend of objective and the constraints of the case study Project;
- ▶ The adaptative and the deductive methods are chosen based on the requirements and constraints of the Project (Nokia);
- ▶ Firstly, the adaptative scenario planning due to the time limitations. The time allocated for the Project allowed creation of only one iteration of the scenarios and thus multiple iterations of the generative scenario planning were not feasible;
- ▶ Secondly, the deductive approach was select as a method of creating the scenario set. The structured approach was accepted as the most efficient in creating a single set of scenarios within allocated time. Also the incremental approach was eliminated as the team of the external experts working on the scenarios was not familiar with the official future;
- ▶ The success depend of an “open mind” efficient team structure (stakeholders, experts and facilitators).

Bibliography

- ▶ Fulton, K. and Searce, D. (2004) *What if? The art of scenario thinking for nonprofits (on line)*, Global Business Network.
- ▶ Ogilvy, J. and Schwartz, P. (1998) 'Plotting your scenarios', in Fahey, L. and Randall, R. (eds.) *Learning from the future*, John Wiley & Sons.
- ▶ Van der Heijden, K. (2005) *Scenarios: The Art of Strategic Conversation*, 2nd ed., Chichester, John Wiley & Sons.
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